

Appl. No. 11/031,899
Amdt. dated May 2, 2008
Reply to Office Action mailed May 21, 2007

CLAIMS: *Please amend the claims according to the status designations in the following list, which contains all claims that were ever in the application, with the text of all active claims.*
(Showing Amendments)

1. A pleated stent assembly comprising:
a balloon; and
a tube having an original diameter,
wherein at least a portion of said balloon is contained within said tube,
wherein said tube and said balloon are co-pleated along longitudinal pleating lines to form a substantially cylindrical pleated tube/balloon assembly having a delivery width, and wherein said delivery width of said assembly is less than said original diameter of said tube,
wherein the wall of said tube is comprised of a pattern of interconnected solid area defining open spaces therebetween, and
wherein said solid area is continuous.
2. The device of claim 1, wherein said tube is formed from a material that undergoes sufficient plastic deformation along said pleating lines to substantially maintain said delivery width of said tube/balloon assembly.
3. The device of claim 1, further comprising a tubular sleeve substantially surrounding said tube/balloon assembly to substantially maintain said delivery width of said tube/balloon assembly.
4. The device of claim 3 wherein said tube is formed from a material having super-elastic properties.
5. The device of claim 1, wherein said tube is flexible along its longitudinal axis.
6. The device of claim 1, wherein the wall of said tube comprises at least one substantially solid annular body section.
7. The device of claim 6, wherein said body section is not radially expandable substantially beyond said original diameter upon inflation of said balloon.
8. The device of claim 1, wherein the wall of said tube comprises at least one annular anchor section, wherein said anchor section is radially expandable beyond said original diameter upon inflation of said balloon.
9. The device of claim 7, wherein the wall of said tube comprises at least one annular anchor section, wherein said anchor section is radially expandable beyond said original diameter upon inflation of said balloon.

10. (CANCELED)

11. The device of claim 10, wherein said pattern restricts radial expansion of said tube substantially beyond said original diameter over a portion of the length of said tube.

12. The device of claim 11, wherein said pattern comprises greater than about 60 percent solid area in the portion of said tube wherein radial expansion is restricted.

13. The device of claim 11, wherein said pattern allows radial expansion of said tube beyond said original diameter over at least a portion of the length of said tube.

14. The device of claim 13, wherein said pattern allows radial expansion up to about 130% of said original diameter in the portion of said tube wherein radial expansion is allowed.

15. The device of claim 10, wherein said solid areas are comprised of longitudinal struts and interconnected circumferential struts.

16. The device of claim 15, wherein said wall comprises at least one annular anchor section, wherein the circumferential struts in said anchor section are radially expandable beyond said original diameter.

17. The device of claim 16, wherein said wall comprises at least one annular body section, wherein the circumferential struts in said body section of said wall are radially non-expandable substantially beyond said original diameter.

18. (CANCELED)

19. The device of claim 18, wherein said tube is formed from an electroformed metal.

20. The device of claim 19, wherein said metal is gold.

21. The device of claim 1, wherein said tube is formed from a biocompatible plastic.

22-31. (CANCELED)

32. (NEW) The stent of claim 1 further comprising a porous surface layer for the controlled elution of a drug or other substance.